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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,924	02/04/2004	Behnam Pourdeyhimi	297/168/2	3493
25297	7590	05/31/2005	EXAMINER	
JENKINS, WILSON & TAYLOR, P. A. 3100 TOWER BLVD SUITE 1400 DURHAM, NC 27707			LONEY, DONALD J	
		ART UNIT	PAPER NUMBER	
		1772		

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/771,924	POURDEYHIMI ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Donald Loney	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 10 February 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1,3-8,10-20,25,27-32 and 34-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-8,10-20,25,27-32 and 34-43 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/23/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-8, 10, 12, 13, 17, 25, 27-32, 34, 36 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Englebert et al (4741941).

Englebert et al teaches a fibrous network formed of the recited fibers having a size of 1 to 100 microns. The three dimensional network can have truncated cones (figure 3 and 10) of height .3mm to 25mm. Refer to column 2, lines 46-60, column 4, line 62 through column 5, line 2 and column 6, lines 2-9, 40-44. Other layers are shown attached to the network (see figures 29 and 30). Englebert et al also teaches that the network can be formed by thermoforming and spun-bonding. Refer to column 2, lines 45 and 46, column 3, lines 5 and 6, column 5, lines, 13-18 and column 7, lines 61 and 62. The characteristic limitations as to the compressibility and anisotropy ratio are deemed inherent in the prior art since the prior art forms the network from the same size filaments in the same manner and the claims fails to structurally distinguish therefrom.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 12, 13, 15-17, 25, 27-32, 36, 38, 39 and 40 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kim et al (5731062).

Kin et al discloses a fiber network formed of poly ethylene terephthalate (PET) fibers of a diameter of at least about .1mm (100 microns). The examiner deems this appears to overlap the applicant's range of less than one 100 microns with sufficient specificity that a 102 rejection would be appropriate. A prima facie case of obviousness also exists if the ranges overlap and it would have been obvious to use smaller sized fibers in order to form a softer three dimensional network. Kim et al also teaches other layers laminated to the substrate (column 6, lines 1-20). The characteristic limitations as to the compressibility and anisotropy ratio are deemed inherent in the prior art since the prior art forms the network from the same size filaments in the same manner and the claims fails to structurally distinguish therefrom.

5. Claims 11, 14, 18-20, 35, 37 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Englebert et al in view of Bodaghi et al (5993943).

The primary reference teaches the invention substantially as recited except for the sheath/core fibers and width of the projections. See the 35 U.S.C. 102 rejection above.

Bodaghi et al teaches that microfibers can be bi-component (i.e. sheath/core) and/or oriented in order to provide fusing of one fiber to the other in thermoforming calendering. See column 7, lines 20-57 and column 10, lines 11-55.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to Englebert et al to use bicomponent fibers, as taught by Bodaghi et al, in order to supply sufficient bonding means thereto when the fibers are thermoformed into a desired shape. The width of the projections, per claims 11 and 35 is deemed obvious to one of ordinary skill in the art motivated by the fact that Englebert et al discloses that the size of the projection can vary depending how they are formed (column 6, lines 2-18) and a change of shape and/or size is generally within ordinary skill in the art.

6. Claims 10, 11, 14, 18-20, 34, 35, 37 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al in view of Bodaghi et al.

The primary reference teaches the invention substantially as recited except for the sheath/core fibers and specific size of the projections. See the 35 U.S.C. 102 rejection above.

Bodaghi et al teaches that microfibers can be bi-component (i.e. sheath/core) and/or oriented in order to provide fusing of one fiber to the other in thermoforming calendering. See column 7, lines 20-57 and column 10, lines 11-55.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to Kim et al to use bicomponent fibers, as taught by Bodaghi et al, in order to supply sufficient bonding means thereto when the fibers are

thermoformed into a desired shape. The specific size of the projections is deemed obvious to one of ordinary skill in the art motivated by the fact that Kim et al teaches that the size and/or shape of the projections can vary to suit a particular application (column 3, lines 39-49) and a change of shape and/or size is generally within ordinary skill in the art.

### ***Response to Arguments***

The applicants arguments filed February 10, 2005 are sufficient to overcome the rejections based upon Watkins et al and Daponte.

7. Applicant's arguments filed February have been fully considered but they are not persuasive.

The applicant argues that Englebert et al fails to teach a deep molded fabric, however, this is not commensurate in scope with the claims and is drawn to a process limitation that would not structurally distinguish over the prior art. The applicant also argues that Englebert et al teaches to melt blow the network, however, the examiner, in the rejection above, referenced the sections in Englebert et al that teach the network can be either melt-blown, or spun-bonded as recited by the applicant.

The applicant argues that Kim et al fails to teach a deep molded fabric, however, this is not commensurate in scope with the claims and is drawn to a process limitation that would not structurally distinguish over the prior art. Kim et al teaches thermo-mechanical deformation in the Abstract. The applicant also argues that Kim et al teaches larger fibers, however, the ranges are deemed to overlapping as discussed in the rejection above.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Loney

Donald Loney  
Primary Examiner  
Art Unit 1772

DJL:D.Loney  
05/26/05